

Cyclohexylamine, an Attractant for *Lathyrophthalmus arvorum* (Fabr.)

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During the testing of fifteen nitrogen compounds as Mediterranean fruit fly attractants it was observed that in every case the lures containing cyclohexylamine were attractive to *Lathyrophthalmus arvorum* (F.).*

The compound was found to be repellent to the Mediterranean fruit fly (*Ceratitis capitata* Wied.).

The lure which contained 9.4 g. of casein, 5.0 g. of sodium hydroxide, 12.9 g. of air slaked lime, and 3.7 g. of cyclohexylamine per liter was compared at a distance of 18 inches with a check lure containing the same ingredients except for the cyclohexylamine. The amine was dried over solid potassium hydroxide and distilled at 133° to 134° C. Glass traps were used in citrus trees about 6 feet from the ground, located at the Hawaii Agricultural Experiment Station. Counts were made after 2 days' exposure. The comparisons were made using four pairs of traps four different times.

The total catch was 557 *L. arvorum* or an average of 35 flies per trap with a mean deviation of 46 percent. There was a total catch of four flies in the control traps while only an occasional specimen was found in the other nitrogenous lures.

The repellency of cyclohexylamine for *Ceratitis capitata* was shown by a catch of 440 flies in the check traps with none in the amine traps.

The 15 nitrogen compounds included cyclohexyl-, methyl-, ethanol-, hydroxol-, and phenyl- amines, ammonia, hydrazine, ethylene diamine, putrescine, pyridine, piperidine, urea, acetamide, and hydrofuramide.

* The identification was checked by Mr. E. H. Bryan.
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